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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/588,547

11/06/2008

Kouji Tasaki

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EXAMINER

TARDIF, DAVID P

ART UNIT

PAPER NUMBER

2876

MAIL DATE

DELIVERY MODE

01/29/2010

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/588,547	Applicant(s) TASAKI ET AL.	
	Examiner DAVID TARDIF	Art Unit 2876	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 August 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date <u>See Continuation Sheet</u> . | 6) <input type="checkbox"/> Other: ____. |

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :20060807, 20070209, 20071129, 20080703, 20090422 20090603, 20090930.

DETAILED ACTION

Priority

Acknowledgement is made to foreign priority claim to JP2004-030535.

Information Disclosure Statement

The information disclosure statements (IDS) submitted on 08/07/2006, 02/09/2007, 11/29/2007, 07/03/2008, 04/22/2009, 06/03/2009 and 09/30/2009 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner. Please note that the examiner does not speak or read languages other than English.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet **within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the**

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abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. **Claims 1-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Morizumi et al. (US 6,459,588 B1).

As to **claim 1**: Morizumi et al. teaches electronic device comprising an IC element (abstract), and a first circuit layer (13) and a second circuit layer (25), wherein the IC element further provides a base substrate formed of silicon (16 in figure 3, column 4, lines 26-39), a semiconductor circuit layer forming a semiconductor circuit on one side of the base substrate (components in 22), and an electrode formed on the semiconductor circuit layer (17), and wherein the first circuit layer is electrically connected either to the other side of the base substrate or the electrode and the second

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circuit layer is electrically connected to that same other side of the base substrate or the electrode, whichever remains unconnected (figures 3, 4). While Morizumi et al. does not specifically teach that base 16 is formed of silicon, it is a standard material to make IC card bases out of, and furthermore, other similar components are formed of the same material as cited, and it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Morizumi et al. such that the base comprises silicon.

As to **claim 2**: Morizumi et al. teaches that the other side of the base substrate is connected with either the first or the second circuit layer via a conductive adhesive agent (18, figure 3).

As to **claim 3**: Morizumi et al. teaches that the conductive adhesive agent is comprised of a thermal hardenable matrix resin (last paragraph, column 5, continuing in column 6), and metallic pieces of granular form (shown in figure 2).

As to **claim 4**: Morizumi et al. teaches that at least the other side of the base substrate is connected with either the first or the second circuit layer via an anisotropic conductive adhesive layer (18, figure 3, last paragraph, column 5, continuing in column 6).

As to **claim 5**: Morizumi et al. teaches that the conductive adhesive agent is comprised of a thermal hardenable matrix resin (last paragraph, column 5, continuing in column 6), and metallic pieces of granular form (shown in figure 2).

As to **claim 6**: Morizumi et al. teaches that the IC element is sealed by a matrix resin of anisotropic conductive adhesive agent (18, figure 3, last paragraph, column 5, continuing in column 6).

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As to **claim 7**: Morizumi et al. teaches that at least either the first or the second circuit layers includes a conductive layer of aluminum or copper (column 4, lines 26-44).

As to **claim 8**: Morizumi et al. teaches that the base substrate is comprised of an organic resin being polyethylene terephthalate (column 6, lines 23-26). While Morizumi et al. does not specifically teach that base 16 is formed of PET, it is a standard material to make IC card bases out of, and furthermore, other similar components are formed of the same material, and it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Morizumi et al. such that the base comprises PET.

As to **claim 9**: Morizumi et al. teaches that the base substrate is comprised of paper (lines 45-55). While Morizumi et al. does not specifically teach that base 16 is formed of paper, it is a standard material to make IC card bases out of, and furthermore, other similar components are formed of the same material as cited, and it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Morizumi et al. such that the base comprises paper.

As to **claim 10**: Morizumi et al. teaches that the IC element is sealed by a matrix resin of anisotropic conductive adhesive agent (18, figure 3, last paragraph, column 5, continuing in column 6).

As to **claim 11**: Morizumi et al. teaches that at least either the first or the second circuit layers includes a conductive layer of aluminum or copper (column 4, lines 26-44).

As to **claim 12**: Morizumi et al. teaches that the base substrate is comprised of an organic resin being polyethylene terephthalate (column 6, lines 23-26). While Morizumi et al. does not specifically teach that base 16 is formed of PET, it is a

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standard material to make IC card bases out of, and furthermore, other similar components are formed of the same material, and it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Morizumi et al. such that the base comprises PET.

As to **claim 13**: Morizumi et al. teaches that the base substrate is comprised of paper (lines 45-55). While Morizumi et al. does not specifically teach that base 16 is formed of paper, it is a standard material to make IC card bases out of, and furthermore, other similar components are formed of the same material as cited, and it would be obvious to one of ordinary skill in the art at the time the invention was made to modify Morizumi et al. such that the base comprises paper.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DAVID TARDIF whose telephone number is (571)270-7810 and email is david.tardif@uspto.gov. The examiner can normally be reached on Monday through Thursday, 8:00 AM - 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Lee can be reached on (571)272-2398. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/DAVID TARDIF/
Examiner, Art Unit 2876

/Michael G Lee/
Supervisory Patent Examiner, Art Unit 2876